

**THE LIMWOODS OF CENTRAL LINCOLNSHIRE AND THEIR
MOTHS INCLUDING FLETCHER'S PUG
EUPITHECIA EGENARIA H.-S. (LEP.: GEOMETRIDAE)**

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PAUL WARING'S ACCOUNT (*antea*, 1-9) of the expeditions mounted in 1995 to the limewoods of central Lincolnshire reads as though previous working had failed to reveal very much. In fact the majority of the species that he lists in his Table 2 were already well known from records compiled by Ric Pilcher and myself; these derived from Ric Pilcher's own work before I arrived on the scene in 1971, and from my own considerable records from the next seven years which were passed to him but evidently escaped inclusion into Duddington and Johnson (1983), with only the most significant of my work added later that year in an apologetic *addendum*.

It is however, about the recent history of the woodlands themselves that I would first seek to write because the present state of these precious woods and their facilities derive largely from the efforts and determination of unsung heroes who were active in protecting them in earlier decades.

The majority of the *Tilia cordata* limewoods formed part of the then Forestry Commission estate of North Lincolnshire which from its early days had been managed on traditional forestry practice with oak *Quercus* as the principal tree planted on the heavy clay soils, often with Scots pine *Pinus sylvestris* and Norway spruce *Picea abies* intended for later removal. The main core of the Bardney string of woods is Chambers which itself is a scatter of ancient limewoods linked by former agricultural land that was planted with the traditional tree mixtures. In late post-war years economic dictum drove the Forestry Commission into plans to eradicate the oak and natural broad-leaved species for timber production; this was attempted by use of herbicides, applied by hand sprayer or by aerial spray from fixed-wing aircraft. Most of the native broad-leaved areas had been felled in the 1939-45 war and no work had been done since, so there was lime coppice growing with ash *Fracinus excelsior*, oak, field maple *Acer campestre* and birch *Betula* into high forest, much of it standing in water with rides impassable even if traceable. The oldest stands in Great West Wood and Hatton Wood had survived because of their unprofitable timber size at war-time coupled with remoteness, that inhibited timber extraction. All woods indeed owed their escape from earlier conversion to agriculture because of their valley bottom sites on the heaviest land.

During those long years of unenlightenment, the Forestry Commission promoted to top positions those most likely to achieve the economic criteria being set and few were brave enough to put their heads above the parapet; it is said that there is always a man for the right occasion in life and such a man chanced to be given the top administrative job to oversee the Eastern

England empire in 1970 and although he was in post for all too short a time it was he who arranged for me to move to Bardney to do the job of Chief Forester, whose domain ran from the Nottinghamshire border to Somercotes plantations on the very east coast (and where I was to find *Ethmia bipunctella* Fabr. larvae on *Echium* (*Ent. Rec.* **90**: 275); I inherited a team of foresters sickened at the carnage and enthusiastic for change alongside a chief-of-staff veteran of Forestry Commission accounting who would manage for me the hefty budget.

Damage done by 1971 was breathtaking; the herbicide 2,4,5-T applied in diesel had been the main instrument of destruction, sprayed on cleared sites in such flood that the forest workers told how the ground ran rivers and how the land stank; when clearance of young broad-leaved trees was too expensive the jim-jem was used, a diabolical invention that chopped into the base of a young lime and then injected poison. The tenacity of the native broad-leaved root-system defied death but produced malformed and stunted growth through which western American shade-bearing conifers were planted. The wettest open areas became choked with *Calamagrostis* and only the better drained were stocked with Corsican pine. In outlying woods, aerial spraying had the ironic effect of stunting the spruce but allowing the oak to recover and these woods I believe have since been sold. The whole dismal programme was a disaster for both site and taxpayer.

Coming green into this mayhem, I quickly found that while the Nature Conservancy staff had been making representation for long enough, they all, from ancient woodland specialist George Peterken to local officer Mike Schofield, regarded Forestry Commission staff to be equally tainted, so I could never achieve with them the rapport I hoped for; the luminaries and wardens of the Lincolnshire Trust for Nature Conservation also regarded me with suspicion that has taken long to dispel. Neighbouring farmers wanted only one thing in life, which was the conversion of the woods to add to their acreage, already of prairie proportions, and I soon ran into hostility when I expressed astonishment that I was expected to deepen drains through and around these lovely woods for farmers' benefit. As local farmers comprised the working end of the Internal Drainage Board I found myself assailed on all sides as I evolved a policy of drain maintenance to existing levels and by permit, after which drainage demands ceased, although relations never improved.

Although the economic direction of the Forestry Commission remained dominant until comparatively recent times, I was fortunate then in being able to reverse the programme of coniferisation at Bardney and to switch money for labour and machine use to a massive scheme of ride widening and ride drainage to which the forest workers responded with great heart and huge success. But it was the response by nature that gave the greatest pleasure, in place of mud and jungle grew swards of primrose *Primula vulgaris*, bluebell *Endymion non-scriptus*, cowslip *Primula veris* and anemone *Anemone*

nemorosa and within the opened woodland canopy the famed lily-of-the-valley *Convallaria majalis* beds blossomed as never before, the blackthorn *Prunus spinosa* and sallows at ride edge gave of their best and my slide collection of this awakening remains amongst my happiest. An early reward was to see White Admiral *Ladoga camilla* appear as the advance guard of their re-occupation of the county and later a single male Silver-washed Fritillary *Argynnis paphia*. Ride awakening brought its own problems when distant executives became alarmed at the accruing cost, but more down to earth were the local Hunts, two of which met at Chambers and both wished to continue the joy of their full field charging tally-ho up and down the newly levelled rides. I learned to resist the bribe of the Hunt-Ball, even the invitation to ride (God forbid!) and other better-concealed pressures, but we ended up good friends with only the Huntsman entering to draw and the field politely restrained at the gate; I even later had lunch with the senior Hunt Master.

Once a form of access was made it became possible to offer thinnings of the better-grown, younger limewoods poles for standing sale, again incurring displeasure from head office that demanded detailed pole measurement on standard forms, whereas we achieved sale by the acre that made possible the thinning of oak, ash and lime by wood bodgers using such antiquated machinery and tractors that Health and Safety rules would not now allow; in this way whole tracts of woods were opened up, first at Ivy Wood, Minting and Great Scrubbs, then on to Great West, Newball and Hardy Gang with the provision that rides were to be made good following the lengthy working of each block.

This programme was sustained for the seven years that I worked there and it attracted increased interest and participation from what is now English Nature and, as always, the Lincolnshire Trust. Not long after I had left, the Forestry Commission made an agreement with the Nature Conservancy Council to declare 270 hectares of limewoods to be managed as a Forest Nature Reserve with a view to restoring coppice whilst managing high forest on long rotation with minimum intervention of the oldest stands. I was hugely pleased to be invited to the inauguration ceremony of the plan at Chambers in 1989.

There must be many folk who have contributed to conservation in the similar broader sense of we who helped restore Bardney limewoods but whose work remains unrecorded. I like to think that they have enjoyed a similar outcome and satisfaction. The history of man's impact on nature and the response of wildlife is the history of our countryside and its flora and fauna and I like to think, too, that those who collect moths or data from sites like the Bardney limewoods might benefit with knowledge of that recent history.

During the whole of my time Lincolnshire, I ran an m.v. trap from the Chambers office and I had abundant opportunity in my daily work to wonder

at the wildlife of the limewoods, to compile maps that charted the appearance of young *Sorbus torminalis* suckers and above all to witness the Lepidoptera. All this while I worked closely with Ric Pilcher at many county sites but especially frequently in the limewoods, my individual records being passed to him. Ric maintained a detailed card index system as part of his scrupulously compiled county data and he was the first modern county recorder for Lincolnshire; presumably this mass of information was made available to Paul Waring along with Johnson's comprehensive update of records to 1995 as well as the printed supplement of the 1983 book.

A few species notes will indicate the difference between one-night stands and regular working; larvae of *Tethea* or D.&S. were numerous on well-grown beds of aspen *Populus tremula* suckers in College Wood, *Hemaris fuciformis* L. regular at Ragged Robin *Lychnis flos-cuculi* in Chambers, some *Acronicta alni* L. neither type nor melanic but of a soft velvety black sheen within rosy dove-grey ground colour, and more *Spaelotis ravida* D.&S. would fall from the office door frame each morning than were to be found in the trap, a habit that at my garden shed some ten miles away supplied collectors anxious to see this moth; *Photedes fluxa* Hb. so plentiful on *Calamagrostis* in Chambers that I used to examine hundreds in order to pick out the red forms, larvae of both *Philereme vetulata* D.&S. and *P. transversata* Hufn. on Purging Buckthorn *Rhamnus cathartica* within the limewoods and also outside it. The most significant species not recorded by Waring is of course *Photedes extrema* Hb., the only known residential population in Lincolnshire; thorough working of *Calamagrostis* beds in all of the limewoods should indicate how strong its presence remains. Of the five pugs given in Table 1, only *Eupithecia valerianata* Hb. was not in these woods in good numbers. Neither Ric Pilcher nor I saw any sign of *Angerona prunaria* L. and despite annual attempts we saw nothing of *Eupithecia egenaria*, either at m.v. light within the limewoods or at the Chambers static trap or by day searching of boles of lime in the older stands. Beating lime flowers was scarcely possible with so much of it out of reach and I found *Tilia cordata* to flower so late that food for *egenaria* larvae might not be available before August of most years. The absence of *T. cordata* seedlings also contrasted with what I have since found in Norfolk, so I had to conclude viability might be reduced further north, but perhaps a higher resident small rodent population might be the answer; however in Norfolk I have seen trees of *T. cordata* with canopy so heavy with fertile seed and bracts in late autumn that the wood wore an orange-yellow mantle the like of which I never saw in Lincolnshire.

Moths like *Epirrhoe rivata* Hb. and *Eupithecia assimolata* Doubleday (abundant as larvae) were known from other habitats and their occurrence in limewoods, like most of the moths in Table 2 of Waring's paper, has no special significance, but then I have never rated most of those listed footman

to be anything other than general in their occurrence in lowland Britain and quite half of the species listed there are noted in Johnson's 1995 updated paper to have been recorded elsewhere in Lincolnshire in most of the years between 1986 and 1995. The moths in Table 2 that most attract my attention are *Hemistola chrysoprasaria* Esp. and *Xestia agathina* Dup., simply because I cannot recall their hostplants from anywhere nearby. In my Table 1 I list those species reckoned to be known nationally only from 31-300 ten km squares that I recorded on the Bardney limewoods in 1971-1978 and that are not noted in Tables 1 and 2 of Waring's paper.

Ric Pilcher found *Schrankia costaestrigalis* Steph. in a number of inland sites from Crowle Waste to Market Rasen to Woodhall; its occurrence within old woodlands awakens one's interest as a potential candidate for *S. intermedialis* Reid but as wing pattern and colour of both taxa are identical that is probably a red herring.

Table 1. List of moths recorded by G.M. Haggett in Bardney limewoods 1971-1978 reckoned to be known from only 31-300 ten km squares in Britain and not recorded by Waring *et al.* in 1995.

Thyatiridae

Polyploca ridens Fab.

Geometridae

Cyclorophora porata L.

Idaea straminata Bork.

Euphyia unangulata Haw.

Eupithecia inturbata Hb.

E. insigniata Hb.

E. valerianata Hb.

E. trisignaria H.-S.

E. tripunctaria H.-S.

Ectropis crepuscularia D.&S.

Notodontidae

Furcula bifida Brahm

Peridia anceps Goeze

Drymonia ruficornis Hufn.

Clostera curtula L.

Arctiidae

Thumata senex Hb.

Noctuidae

Spaelotis ravida D.&S.

Lacanobia w-latinum Hufn.

Mythimna straminea Treits.

Acronicta alni L.

Mormo maura L.

Ipimorpha subtusa D.&S.

Enargia paleacea Esp.

Parastichtis ypsilon D.&S.

Apamea ophiogramma Esper

Amphipoea fucosa Freyer (det. gen.)

Celaena leucostigma Hb.

Archanara dissoluta Treits.

Arenostola phragmitidis Hb.

Coenobia rufa Haw.

Chilodes maritimus Tausch.

Nycteola revayana Scop.

Section 2 of the Addendum paper issued November 1983 by the authors of *Butterflies and Larger Moths of Lincolnshire* 1983 is entitled "Notes on species of particular interest found in the Bardney woodlands and at Lissington between 1971 and 1978, received from Mr Gerry Haggett 16.11.83". That paper was written by me after I had been invited to introduce the book at its launch at a meeting of the Lincolnshire Naturalists Union in the summer of 1983; it was an attempt to fill the most obvious gaps registered in a quick scan of the book which I was seeing for the first time.

That paper does not include some the some moths listed below because I regarded them to be of pretty general occurrence (as I still do) or because they had already been given mention in the Duddington and Johnson (1983). Their status coding is of course a recent innovation.

Reference

Duddington, J. and Johnson, R., 1983. *The Butterflies and Larger Moths of Lincolnshire*. Lincolnshire Naturalists' Union.

OBITUARY

Thomas Cecil Dunn BSc, MSc, MBE

It was with a feeling of great sadness and loss that the naturalists of the north of England learned of the death of Tom Dunn on Monday 21 July 1997.

Born on 8 January 1911 at Edmonsley, County Durham, Tom was the son of a Colliery Railwayman who worked at Pelton Fell, Co. Durham, at that time a large railway junction. It was from the nameplate of one of the small shunting engines on this railway that Tom received his middle name of Cecil. After a basic junior school education Tom won a free place to Chester-le-Street Secondary School (now a Grammar School). Without this, Tom would not have had a higher education as his parents would not have been able to afford the fees. An additional award enabled him to stay at school where he obtained his Higher School Certificates. A further grant partially financed his place at University. The remaining money for his education coming from his violin accompaniment of silent films at local cinemas.

He went on to take a "first" in Botany at Hatfield College in 1932. In this he was in a class of one as Botany was a new subject in the curriculum. After leaving university during the depression, he held a series of temporary teaching posts and obtained further qualifications by way of a City and Guilds Diploma in Woodwork and Engineering Drawing. He found a permanent post shortly before the Second World War at Blaydon, teaching the unemployed men and boys woodwork.

He served with the RAF between 1939 and 1945 installing radio equipment into aircraft.

His marriage at the beginning of the War to Marjory Jude was to produce a son, Alec and a daughter Judith. Tragically his wife passed away whilst still young in 1960. From 1945 to 1971 he taught at the Chester-le-Street Grammar School, initially as a woodwork instructor, and in later years as the biology teacher. His interest in natural history dates from his early schooldays when he collected snails. This initial interest expanded into his lifelong study of botany and entomology.